

#5

SEQUENCE LISTING



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<120> VECTORS FOR EXPRESSING HETEROLOGOUS PEPTIDES AT THE AMINO-TERMINUS OF  
POTYVIRUS COAT PROTEIN, METHODS FOR USE THEREOF, PLANTS INFECTED WITH SAME AND  
METHODS OF VACCINATION USING SAME

<130> 1686/4

<140> 09/963,761

<141> 2001-09-27

<150> US 60/253,136

<151> 2000-11-28

<160> 33

<170> PatentIn version 3.1

<210> 1

<211> 837

<212> DNA

<213> Zucchini yellow mosaic virus

<400> 1

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acgaaggaca aggatgtgaa tgctggttct catgggaaaa ttgtgccgcg tctttcgaag      180
atcacaaaga aaatgtcatt gccacgcgtg aaaggaaatg tgatactcga tattgatcat      240
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tcaaggttgt ttggccttga tggaaatggt gccaccacta gcgaagacac tgaacggcac      780
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<213> Zucchini yellow mosaic virus

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35 40 45

Gly Ser His Gly Lys Ile Val Pro Arg Leu Ser Lys Ile Thr Lys Lys  
50 55 60

Met Ser Leu Pro Arg Val Lys Gly Asn Val Ile Leu Asp Ile Asp His  
65 70 75 80

Leu Leu Glu Tyr Lys Pro Asp Gln Ile Glu Leu Tyr Asn Thr Arg Ala  
85 90 95

Ser His Gln Gln Phe Ala Ser Trp Phe Asn Gln Val Lys Thr Glu Tyr  
100 105 110

Asp Leu Asn Glu Gln Gln Met Gly Val Val Met Asn Gly Phe Met Val  
115 120 125

Trp Cys Ile Glu Asn Gly Thr Ser Pro Asp Ile Asn Gly Val Trp Val  
130 135 140

Met Met Asp Gly Asn Glu Gln Val Glu Tyr Pro Leu Lys Pro Ile Val  
145 150 155 160

Glu Asn Ala Lys Pro Thr Leu Arg Gln Ile Met His His Phe Ser Asp  
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Ala Ala Glu Ala Tyr Ile Glu Met Arg Asn Ala Glu Ala Pro Tyr Met  
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Pro Arg Tyr Gly Leu Leu Arg Asn Leu Arg Asp Arg Ser Leu Ala Arg  
195 200 205

Tyr Ala Phe Asp Phe Tyr Glu Val Asn Ser Lys Thr Pro Glu Arg Ala  
210 215 220

Arg Glu Ala Val Ala Gln Met Lys Ala Ala Ala Leu Ser Asn Val Ser  
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Ser Arg Leu Phe Gly Leu Asp Gly Asn Val Ala Thr Thr Ser Glu Asp  
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<212> DNA  
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<400> 4  
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<210> 5  
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<212> PRT  
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<220>  
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<400> 5

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<212> DNA  
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<212> DNA  
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<210> 9  
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<210> 10  
<211> 77  
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actcagccaa ctgtggc 77

<210> 11  
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cids were deleted

<400> 11  
cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcgg atccgatact 60  
ggagctacaa agaaagataa ag 82

<210> 12  
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<220>  
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uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic  
Virus (AGII) coat protein gene of which the N' terminal 13 amino  
acids were deleted

<400> 12  
cagctgcagt cagcatcaga gcagaagctc atttcagagg aggatctcgg atccaagaaa 60  
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<210> 13  
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uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic  
Virus (AGII) coat protein gene of which the N' terminal 18 amino  
acids were deleted

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<210> 14  
<211> 30  
<212> DNA  
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<223> Nucleotide sequence encoding the peptide derived from a partial H  
uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic  
Virus (AGII) coat protein gene of which the N' terminal 23 amino  
acids were deleted

<400> 14  
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<210> 15  
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<210> 16  
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<210> 17  
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<212> DNA  
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<400> 17  
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<210> 18  
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<212> DNA  
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<210> 19  
<211> 30  
<212> DNA  
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uman c-Myc-tag fused to the N-terminus of Zucchini Yellow Mosaic Virus (AGII) coat protein gene of which the N' terminal 48 amino acids were deleted

<400> 19  
ctcggatccg gttctcatgg gaaaattgtg 30

<210> 20  
<211> 51  
<212> DNA  
<213> Foot-and-mouth disease virus

<400> 20  
agtgtgagag gagatcttca agtgcttgca cgaaaagcag caagaccact t 51

<210> 21  
<211> 17  
<212> PRT  
<213> Foot-and-mouth disease virus

<400> 21  
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Leu

<210> 22  
<211> 87  
<212> DNA  
<213> Artificial

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<223> Nucleotide sequence encoding the peptide derived from the Foot and Mouse disease Virus (FMDV) coat protein epitope fused to the N-terminus of Zucchini Yellow Mosaic Virus (AGII) coat protein gene of which the N' terminal 13 amino acids were deleted

<400> 22  
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aagaaagata aagaagatga caaaggg 87

<210> 23  
<211> 83  
<212> DNA  
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<220>  
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83

<210> 24  
<211> 84  
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<213> Artificial

<220>  
<223> Nucleotide sequence encoding the peptide derived from a partial Human c-Myc-tag fused to the N-terminus of FMDV coat protein epitope fused to N-terminus of Zucchini Yellow Mosaic Virus (AGII) coat protein gene of which N' terminal 13 aa's were deleted

<400> 24  
cgcggtatccg tgagaggaga tcttcaagtg cttgcacgaa aagcagcaag accacttaag 60  
aaagataaag aagatgacaa aggg 84

<210> 25  
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<212> DNA  
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<220>  
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<400> 25  
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<210> 26  
<211> 34  
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<220>  
<223> Nucleotide sequence encoding the Zucchini Yellow Mosaic Virus (ZYMV-AGII) NIa protease motif fused to the N-terminus of ZYMV (AGII) coat protein gene of which the N' terminal 8 amino acids were deleted

<400> 26  
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<210> 27  
<211> 37  
<212> DNA  
<213> Artificial

<220>  
<223> Nucleotide sequence encoding the Zucchini Yellow Mosaic Virus (ZYMV-AGII) NIa protease motif fused to the N-terminus of ZYMV (AGII) coat protein gene of which the N' terminal 13 amino acids were deleted



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<210> 28  
<211> 24  
<212> DNA  
<213> Gallus gallus

<400> 28  
tccattatta atttcgaaaa gttg 24

<210> 29  
<211> 8  
<212> PRT  
<213> Gallus gallus

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Ser Ile Ile Asn Phe Glu Lys Leu  
1 5

<210> 30  
<211> 56  
<212> DNA  
<213> Artificial

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<210> 31  
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<212> DNA  
<213> Artificial

<220>  
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<211> 22  
<212> DNA  
<213> Zucchini yellow mosaic virus

<400> 32  
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<210> 33  
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<212> DNA  
<213> Zucchini yellow mosaic virus

<400> 33  
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